



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/594,517	06/15/2000	Gerald Francis McBrearty	AUS000264US1	1942
40412	7590 08/26/2005		EXAMINER	
IBM CORPORATION- AUSTIN (JVL)			SON, LINH L D	
PO BOX 906	EEUWEN & VAN LEE 09	UWEN	ART UNIT PAPER NUMBER	
AUSTIN, TX	78709-0609		2135	

DATE MAILED: 08/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

7 !							
	Application No.	Applicant(s)					
	09/594,517	MCBREARTY ET AL.					
Office Action Summary	Examiner	Art Unit					
	Linh LD Son	2135					
The MAILING DATE of this communication a Period for Reply	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REF THE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a r - If NO period for reply is specified above, the maximum statutory perion - Failure to reply within the set or extended period for reply will, by state Any reply received by the Office later than three months after the may earned patent term adjustment. See 37 CFR 1.704(b).	N. 1.136(a). In no event, however, may a relepty within the statutory minimum of thirt od will apply and will expire SIX (6) MON tute, cause the application to become AB	eply be timely filed y (30) days will be considered timely. THS from the mailing date of this communication. ANDONED (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on 15	June 2000.						
· <u> </u>	his action is non-final.						
,—	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice unde	r <i>Ex parte Quayle</i> , 1935 C.D	. 11, 453 O.G. 213.					
Disposition of Claims							
4)	rawn from consideration.						
Application Papers							
9) The specification is objected to by the Exami							
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the							
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the priority docume application from the International Bure * See the attached detailed Office action for a life.	ents have been received. ents have been received in A riority documents have been eau (PCT Rule 17.2(a)).	pplication No received in this National Stage					
Attachment(s)							
1) Notice of References Cited (PTO-892)		ummary (PTO-413)					
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/0 Paper No(s)/Mail Date 	. 🗖	c)/Mail Date Informal Patent Application (PTO-152) 					

Application/Control Number: 09/594,517 Page 2

Art Unit: 2135

DETAILED ACTION

This written rejection is responding to the amendment received on October 19th,
 2004.

2. Claims 1-5, 7-13, 15-21, and 23-27 are pending.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1, 5, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kung, US Patent No. 5241594, in view of Wu, US Patent No. 6539479B1.
- 5. As per claims 1, 5, and 27, Kung teaches "a method for transmitting data securely between computers, said method comprising: establishing a secure connection between a first computer system and a second computer system, each of the computer systems connected to a computer network" in (Col 5 line 37 to Col 6 line 2, and Col 6 lines 23-40); "sending a password from the first computer system to the second computer system across the secure connection" in (Col 6 lines 23-50); "encrypting one or more packets of data using the key as an encryption key and responsively deciphering the data packets using the key as the encryption key; transmitting the one

Art Unit: 2135

or more packets of data from one of the computer systems to the other computer system; deciphering the one or more packets of data at the receiving computer system using the key as the encryption keys" in (Col 6 lines 23-40); "sending a request from the first computer system to the second computer system prior to the establishing of the secure connection" in (Col 6 lines 23-40); and "responding to the request by the second computer system, the response further including: informing the first computer system that the second computer system accepts the data that is encrypted" in (Col 6 lines 23-40). However, Kung does not teach of implementing the password transferred over the secured communication as the encrypt/decryption keys. Nevertheless, Wu teaches a method of generating a session key to encrypt/decrypt information transmitting between a client and a server with a function of the user's password (Col 5 lines 45-53, and Col 6 line 1-10). It would have been obvious at the time of the invention was made for one having ordinary skill in the art to modify Wu's teaching to use the simple password as the session key instead of spending processing time calculating the session key from the password and incorporate password session key with Kung's teaching to provide a simple-secured communication between two parties.

- 6. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kung, in view of Wu, and further in view of Van Oorschot, US Patent No. 6317829B1.
- 7. As per claims 2 and 3, Kung and Wu discloses the method as described in claim
- 1. However, Kung and Wu do not further teach the sending a second password based

Art Unit: 2135

on an event automatically, and the second password replacing the password as the encryption key. Nevertheless, Van Oorschot does teach a method of replacing the password when it is expired (Col 6 lines 21-32). Therefore, it would have been obvious at the time of the invention was made for one having ordinary skill in the art to incorporate Van Oorschot teaching with Kung's and Wu's method to ensure a high security level of encryption at all time.

- 8. Claims 4 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kung, in view of Wu, and further in view of Tachibana, Noriyuki (JP/363039228A).
- 9. As per claims 4 and 7, Kung and Wu disclose the method as described in claims
 1. However, Kung and Wu do not teach the changing the password using the counter
 as part of the password and incremented the counter after each transmission.

 Nevertheless, Tachibana, Noriyuki discloses the "Secret securing system" invention,
 which teaches a method of using of the inputted digit as part of the password (also well
 known in the art as Counter) as password information and the time interval of the
 inputting a password to check the validity of the password (See the Constitution and
 Abstract); It is obvious at the time of the invention was made for one of ordinary skill in
 the art to incorporate the timer (counter) as pad of the password to expire the password
 or ensure the validity of the password before accessing a secured resource (See the
 last sentence of the constitution). Since the password transmission increment the input
 digit of the password, it is also obvious that the transmission input digit here can be

Art Unit: 2135

preset to expire the password or initialize the sending of a replacement password (See the 2nd d 3rd sentence of the Constitution).

- 10. Claims 8, 9, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kung in view of Wu, and further in view of Eberle et al (US-4249180).
- 11. As per claims 8, 9, and 10, Kung and Wu disclose the method and the apparatus as described in claim 1. However, Kung and Wu do not teach: the method of encrypting the data selectively; selection is based on determining a sensitivity of the data; analyze and determine the data packet is encrypted or not before deciphering it. Nevertheless, Eberle et al disclose the "Past dependent microcomputer cipher apparatus" invention, which includes all the features above. Eberle et al teach the use of the predetermined control characters of the encoded data to selectively encrypting or deciphering (Col 1 lines 5-10). The predetermined control character can be used to mark the sensitive data. Therefore it would be obvious at the time of the invention for one of ordinary skill in the art to combine method and as well the apparatus of Eberle et al with Scheidt method to ensure the integrity of the data file and to prevent hacker snooping the data content (Col 1 lines 20-25). Further more, Eberle et al invention mainly focus on a hardware apparatus. Nevertheless, the anticipation of using software instead of hardware to carry out the task is also clearly taught (Col 1 lines 45-55).

- 12. Claims 11, 12, 17, 19, 20, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kung, in view of Wu, and further in view of Nendell et al, hereinafter "Nendell" (US/668321B2).
- 13. As per claims 11, 12, 17, 19, 20, and 24, Claim 1 is incorporated. However, neither Kung nor Wu teaches the sending a password from the first computer system to the second computer system. Nevertheless, Nendell discloses the "Verification of Identity of Participant in Electronic Communication" invention, which teaches a method of transmitting a password from the first computer to the second computer to unprotect (decrypt) the information (Col 3 lines 31-51). Therefore, it is obvious at the time of the invention was made for one of ordinary skill in the art to incorporate both teaching to allow the security initiation process of the sender and the receiver.
- 14. Claims 13, 15, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kung in view of Wu, further in view of Nendell, and further in view of Van Oorschot.
- 15. As per claims 13, 15, and 21, Kung, Wu and Nendell disclose the method as described in claims 11, 13, and 19. However, Kung, Wu, and Nendell do not further teach the sending a second password based on an even automatically, and the second password replacing the password as the encryption key. Nevertheless, Van Oorschot does teach a method of replacing the password when it is expired (Col 6 lines 21-32).

Art Unit: 2135

Therefore, it is obvious at the time of the invention was made for one of ordinary skill in the art to incorporate Van oorschot teaching with Kung and Wu method to ensure a high security level of encryption at all time.

- 16. Claims 16, 18, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kung in view of Wu, further in view of Nendell, and further in view of Tachibana, Noriyuki.
- 17. As per claims 16, 18, and 23, Kung, Wu, and Nendell disclose the method as described in claims 11, 13, and 19. However, Kung, Wu, and Nendell do not teach the changing the password using the counter as part of the password and incremented the counter after each transmission. Nevertheless, Tachibana, Noriyuki discloses the "Secret securing system" invention, which teaches a method of using of the inputted digit as part of the password (also well known in the art as Counter) as password information and the time interval of the inputting a password to check the validity of the password (See the Constitution and Abstract). Therefore, It would have been obvious at the time of the invention was made for one of ordinary skill in the art to incorporate the timer (counter) as pad of the password to expire the password or ensure the validity of the password before accessing a secured resource (See the last sentence of the constitution). Since the password transmission increment the input digit of the password, it is also obvious that the transmission input digit here can be preset to expire

Art Unit: 2135

the password or initialize the ding of a replacement password (See the 2nd and 3rd sentence of the Constitution).

- 18. Claims 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kung in view of Wu, further in view of Nendell, and fudher in view of Eberle.
- As per claims 25 and 26, Kung, Wu, and Nendell disclose the method and the 19. apparatus as described in claim 19. However, Kung, Wu, and Nendell do not teach: the method of encrypting the data selectively', selection is based on determining a sensitivity of the data; analyze and determine the data packet is encrypted or not before deciphering it. Nevertheless, Eberle et al disclose the "Past dependent microcomputer cipher apparatus" invention, which includes all the features above. Eberle et al teach the use of the predetermined control characters of the encoded data to selectively encrypting or deciphering (Col 1 lines 5-10). The predetermined control character can be used to mark the sensitive data. Therefore it would be obvious at the time of the invention for one of ordinary skill in the art to combine method and as well the apparatus of Eberle with Scheidt method to ensure the integrity of the data file and to prevent hacker snooping the data content (Col 1 lines 20-25). Further more, Eberle et al invention mainly focus on a hardware apparatus. Nevertheless, the anticipation of using software instead of hardware to carry out the task is also clearly taught (Col 1 lines 45-55).

Application/Control Number: 09/594,517 Page 9

Art Unit: 2135

Response to Arguments

20. Applicant's arguments filed 07/21/05 have been fully considered but they are not persuasive.

- 21. As per remark on page 11, 2nd paragraph, Applicant argues that Kung never teaches or suggests "sending a request from a first computer to a second computer prior to establishing a secure connection, the first computer and the second computer included in a plurality of computers". As cited in the Office Action dated 03/09/05, Col 6 lines 23-40, "When the user wishes to access information stored in the remote computer 13, the procedure 33 requests the secure communication procedure 32 to initiate a communication protocol session with the secure communication procedure 35. Both procedure 33 and procedure 32 are located within the workstation 11.... ", discloses the claimed feature clearly.
- 22. As per remark on page 11, 3rd paragraph, Applicant argues that Kung never teaches or suggests "receiving a response from the second computer, whereby the response informs the first computer that the second computer accepts encrypted data." As cited above, Kung discloses the steps of requesting and establishing a secure communication between the two computers. The steps involve initiating the request to establish the secure connection to successfully establishing the secure connection for data transferring. The informing step is explicitly discloses by Kung in the event of both parties acknowledging a successful connection establishment.

Art Unit: 2135

- 23. As per remark on page 12, 1st paragraph, Applicant argues that Kung does not teach or suggest establishing the secure connection between the two computers. As cited above, it is clearly that Kung does discloses this feature.
- 24. As per remark on page 15, 1st paragraph, Applicant argues that Wu does not teach or suggest encrypting data using the password. As rejected in the Office Action dated 03/09/05, Examiner wrote "However, Kung does not teach of implementing the password transferred over the secured communication as the encrypt/decryption keys. Nevertheless, Wu teaches a method of generating a session key to encrypt/decrypt information transmitting between a client and a server with a function of the user's password (Col 5 lines 45-53, and Col 6 line 1-10). It would have been obvious at the time of the invention was made for one having ordinary skill in the art to modify Wu's teaching to use the simple password as the session key instead of spending processing time calculating the session key from the password and incorporate password session key with Kung's teaching to provide a simple-secured communication between two parties." Examiner explained clearly how Wu's teaching would be modified to incorporated with Kung. It is obvious that the modification and incorporation of Wu and Kung would obviously read on the claimed invention.
- 25. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

26. Therefore, the rejection basis dated 03/09/05 is maintained. See above.

Conclusion

27. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

- 28. Any inquiry concerning this communication from the examiner should be directed to Linh Son whose telephone number is (571)-272-3856.
- 29. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Kim Y. Vu can be reached at (571)-272-3859. The fax numbers for this group are (703)-872-9306 (official fax). Any inquiry of general nature or relating to the

Art Unit: 2135

status of this application or proceeding should be directed to the group receptionist

whose telephone number is (571)-272-2100.

30. Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval IPAIR.I system. Status information for

published applications may be obtained from either Private PMR or Public PMR. Status

information for unpublished applications is available through Private PMR only. For

more information about the PAIR system, see http://pzr-direct.uspto.gov. Should you

have questions on access to the Private PAIR system, contact the Electronic Business

Center (EBC) at 866-217-9197 (toll-free).

Linh LD Son

Patent Examiner

Primary Examiner
Art Unit 2135